ARIZONA DEPARTMENT OF AGRICULTURE
PLANT SERVICES DIVISION
CITRUS HEALTH FOUR POINT PLAN

Citrus is an Arizona icon and is engrained into the landscape throughout the temperate areas of the state, from Yuma to Safford and from Nogales to Kingman. Professionals, hobbyists, and homeowners are passionate about growing and caring for citrus across the state. Citrus propagation and maintenance provide added income and jobs to the nursery and landscape industry. Reported harvested citrus fruit accounted to $55.5 million to the $23.3 billion dollar agricultural contribution to the state's economy in 2017. It is a top priority to maintain clean and healthy citrus to ensure this icon is around for generations to come.

The Arizona Department of Agriculture (AZDA) has a strategy in place for any future discovery of dangerous citrus pests or diseases that are not known to occur in the state and could pose a significant economic or ecological impact. Citrus greening disease, also called Huanglongbing (HLB), is the most devastating disease of citrus known worldwide and the top priority on the state's radar of citrus diseases. There is no cure or remedy for HLB and once infected the tree will eventually die, sometimes in little as 5 years.

In 2009, the AZDA first detected the vector of HLB, the Asian citrus psyllid (ACP), in the southwest corner of the state in Yuma County. From that point the AZDA has shifted into high gear surveying for HLB and other citrus pests and diseases. AZDA is also continually assessing the risk of pathways and preparing for the potential detection and response of an HLB incident. So far, no plant or ACP has tested positive for HLB.

There are four critical components to protecting Arizona citrus, these include:

- **Survey and Detection**

Arizona implements an annual citrus health survey and detection program in coordination with the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (USDA-APHIS-PPQ). High risk locations are determined, in part, through an approved risk assessment model. AZDA and USDA-APHIS-PPQ coordinate activities to survey and collect symptomatic, random asymptomatic, and HLB vector samples for DNA polymerase chain reaction

(PCR) analysis. The University of Arizona's (U of A) County Extension Office, Master Gardener Program shares information regarding questionable citrus trees that may require testing for HLB, or other citrus pest or disease of concern. PCR analysis is performed under an agreement with the U of A. To date, no sample has tested positive for HLB.

✦ Delimitation and Rapid Response

In the event that, through the survey and detection process, a citrus plant or ACP tested positive for HLB the AZDA would implement an intensified survey to determine the extent of the infection. This would be coordinated in partnership with USDA-APHIS-PPQ to ensure an optimized use of resources. An Incident Command System (ICS) would be activated to effectively coordinate activities, this is the same system used by wildfire managers, the Federal Emergency Management Agency (FEMA), and other incident responders. The information gathered would be utilized by planning officials to determine the best course of action to mitigate the situation.

✦ Mitigation and Vector Control

Once a response to an incident has been initiated and the situation has been evaluated, the mitigation process can begin. Containment and control measures will be assessed and then implemented to ensure that infected and/or infested plant material is contained to lessen the risk of further spread of the disease. Based on the extent of infection and/or infestation containment and control measures may include:

- Quarantine of a geographical area
- Vector control
- Tree Removal
- Containment of infected plant material
- On-going monitoring
- Restrictions on the movement of citrus plant material
- Area-wide vector control

✦ Outreach and Education

Communication within AZDA, cooperating agencies, municipalities, organizations, and the general public are key to providing useful and mission critical information to maximize the effectiveness of the activities involved prior to, and in times of, responding to the detection of HLB, or other citrus pest or disease. A more informed public raises awareness and encourages safe practices in growing and maintaining citrus. The greater the efficiency in communication during a citrus health incident can have a significant positive impact in the effectiveness in responding to, and mitigating, a situation. Ensuring that all inspectors in the field have the most up to date training on survey techniques, identification knowledge, and response protocols provides greater assurance that a significant pest or disease is caught early and provides the greatest opportunity to contain a potentially devastating condition for citrus health in Arizona.

For more information please call the Arizona Department of Agriculture at (602) 542-0955